

ADSC WSDOT JOINT MEETING

The meeting began at 8:30 on Tuesday April 27th, 2004 in the electrical conference room at the Headquarters Materials Lab in Tumwater.

The following people attended the meeting:

Name	Company	Telephone	E-mail
Virgil E Schmidt	WSDOT	360-705-7825	schmidv@wsdot.wa.gov
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Tom Armour	DBM	253-838-1402	tarmour@dbmcm.com
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Bob Birdsall	DBM	253-584-3711	bobb@dbmcm.com
Alfred Lau	AGRA	360-474-8290	alau@agrafoundations.net
Jim Cuthbertson	WSDOT	360-709-5452	cuthbej@wsdot.wa.gov
Jeff Grieder	Malcolm Dr.	253-345-3300	jgrieder@malcolmdrilling.com
Partick Clarke	WSDOT	360-705-7220	clarkep@wsdot.wa.gov
Alan Macnab	CJA	206-575-8248	amucnab@condon-johnson.com
Tony Allen	WSDOT	360-709-5450	allent@wsdot.wa.gov
Moh Shekhizadeh	WSDOT	360-705-7828	sheikhm@wsdot.wa.gov

The minutes of the last meeting were approved without revisions.

ACTION ITEM, Moh, last month's meeting is going to be published on the WSDOT Internet site.

Constructability Review of SR 509, Des Moines Creek Bridge Shafts

Moh handed out 5 plans sheets that showed a job that will widen a flat slab bridge over Des Moines Creek on SR 509. This project will be administered by the City of Des Moines; it is being reviewed by the state. Shannon and Wilson is the Geotechnical Engineer on the project.

The committee members had several questions after a quick review during the meeting:

Why is there a strut in the plans for bracing the walls during construction, wouldn't it be easier and cheaper to use the bridge superstructure as a strut.

The asymmetrical steel cages shown in the shaft details are difficult to work with.

Why are they doing a secant pile wall, why not drill the shafts, shotcrete between the shafts for a temporary wall and then cast a fascia wall over the shafts and shotcrete for the permanent wall.

The overlap between the lean shafts and the reinforced shafts is only 3 inches this may not be enough to keep the auger in alignment during drilling operations, 5 to 6 inches is preferred.

Action Item, the contractors on the committee, are to get their review comments back to Alan Macnab by Friday, April 30th, for submission to the State.

Constructability Review of the I-5 to International Boundary Test Shaft Project on SR 543

Jeff Peterson from Bellingham made a power point presentation to the committee showing the site conditions of the proposed project. Some of the committee comments were:

Is the site clearing and grubbing necessary for the whole area outlined in the presentation, the work area is all the drillers need for the job, a lay down area for rebar cage fabrication could be done at a different location and the rebar cage could then be hauled to the shaft.

The excavation for the shaft removal and shaft removal could be done under the later construction job when the prime contractor and grading contractor are on site.

The estimated costs for lateral load testing of the shafts was between \$60,000 and \$70,000.

June 14th is the tentative ad date for this project.

Action Item, the contractors on the committee, will have comments on their review back to Alan Macnab by April 30, so they can be forwarded to the State.

Update on Design Changes

There was a discussion about if an oscillator was used and a slip casing was placed inside for either temp. Shoring or permanent shoring, what the minimum reinforcing cover needed to be and also what the shaft diameter needed to be to make the clearances and rebar cover work.

Next reinforcing of shafts was discussed and the contractors would like as much opening as possible between the vertical bars and also the spiral pitch. The contractors would like to see a minimum clear opening between the steel of 6 inches if possible.

There was also a discussion about modifying the steel cages as the shaft went deeper into the ground. The contractors thought it would work to delete some of the vertical bars as we went lower in the shaft but they didn't like changing the bar size to reduce steel area. The contractors thought the rigidity of the cage could be compromised by not having some of the vertical steel continuous from top to bottom.

Action Item, Alan is going to discuss changing the number of vertical reinforcing bars in the shaft cages with regards to cage stability during placement in the shaft with the reinforcing subcontractors, to see what their take on this issue is.

Acceptance of Various Types of Centralizers

The committee discussed various types of centralizers being used, pvc pipe, plastic balls, steel reinforcing bar, and rollers. The Bridge Office is looking at what is being used and will modify the shaft special provision to list the approved spacers for shafts in the future. Jim Cuthbertson said that spacers using in uncased holes also need to be looked at not just spacers in temp., permanent, and oscillator casing.

Action Item, Don Morin said he is going to have a spacer fabricated and brought to the next meeting as an example of a spacer that works well, for everyone to see.

Acceptance of Single Beam Soldier Piles with Tiebacks

The Bridge Office is about 90% in agreement to use single beam soldier piles instead of double beams, and then using eccentric PGA with tension bars attached between the soldier piles so the anchor eccentricity won't be a problem. In the future you will see these types of designs in the Soldier Pile walls.

Action Item, Don Morin is going to send Moh some examples of eccentric soil nail anchors without struts before the next meeting.

Type of Excavation in Front of Walls

This question had mostly to do with soldier pile walls and the excavation necessary immediately in front of the wall; it more than likely will be handwork. The AGC Bridge Committee thought it was fine the way the current specifications read that it was "Roadway Excavation."

Tony Allen's Reply to The Summary of Slurry Submittal

The committee discuss the approval of different slurries during the shaft submittal process, Jim C. said that one of the things he was most concerned about was the QA/QC of the slurries submitted and that the correct procedures were followed with regards to shaft installations and slurries. The discussion went on for an extended amount of time; the people present thought that there were enough issues to discuss that this could be a separate meeting.

Action Item, a meeting to discussion the use of slurries on WSDOT shafts has been set up for June 17th, in the Electrical Conference Room at the Tumwater Materials Lab at 8:30 am.

Proposed Revisions to the Special Provisions, Section 3.04B and Section 3.07B

The discussion on section 3.04B was deferred until the slurry meeting on June 17th, along with the discussion on section 3.07D because of time.

Updates to the Specials

The bridge specials and revisions were handed out see the attachment. The changes are highlighted in red and green.

The specials now require a slurry technical representative be at the shaft preconstruction conference. CSL tests are now required on all wet method installed shafts. The soil excavation special on pages 21 and 22 has been revised.

Action Item, the committee members are to get back to Moh if they have any comments on the revisions to the special provisions prior to the next meeting.

The meeting was adjourned at approximately 11:45.

Next meeting is June 10th at the electrical conference room at the Tumwater Lab.

A slurry meeting is scheduled for June 17th at the electrical conference room at the Tumwater Lab.